



Preemptive

Naval Safety Center *LESSONS LEARNED*



19-22

ELECTRIC SCOOTERS

"You look so cool on that e-scooter!" — Said no one...ever

Our Navy and Marine Corps safety lessons learned products are typically the result of analyzing mishap reports or trends in our database. In this case, however, we're attempting to get ahead of the hospital visits and report on a new trend that begs for injury — electric scooters. While we don't have much, if any, data on e-scooter mishaps in our system (yet), there is plenty of open source information that suggests these electric rollerblades with handlebars are a trip to the emergency room waiting to happen. As if hoverboards weren't enough to satisfy that "live dangerously" craving, enter the e-scooter.



The first electric-powered scooters, such as the ones pictured above, were released to consumers in 2003, so why the hype now? — Rentals! Major cities across the country are now strewn with rental e-scooters on nearly every street corner. Just download the app, pick your scooter, and off you go — no pads, no practice, no fear. Did we mention these things travel up to 15 mph (the regulated maximum speed in most cities for rentals)? That's enough speed to outrun a Black Mamba snake or a Komodo Dragon (*unlikely, but you never know*). What's more, some e-scooter brands available for purchase can reach speeds up to 40 mph! Before we get to the national e-scooter accident statistics, here are a few human-powered scooter mishap examples (*and one dog-powered*) from our Navy and Marine database to set the stage. Keep in mind; these "unplugged" Sailors were likely traveling in the single-digit speed range. Electric motors would only have made it worse.

- The Sailor was attending a neighborhood get together in a cul-de-sac. While riding a push scooter, he glanced back over his shoulder (*perhaps in a "look at me mom!" moment*) and lost control. The remainder of his short ride consisted of a head first dive into the pavement resulting in a black eye, busted lip, numerous scrapes to the face, abrasions to his hand and arm, and 14 days limited duty. — *Our guess is, if mom was looking, she wasn't impressed.*
- A service member was riding a scooter and fell after attempting a trick. The report also says he was on his way home and was tripped up by imperfections in the road (*Oh, so that's what it was...not the attempted "Tailwhip" or "Barspin" maneuver*). The report goes on to say the member was inexperienced in riding scooters. — *Perhaps this Tony Hawk fan should ease into scooter trick riding, and wear some personal protective equipment (PPE) while he's at it. The report recommended going to a designated skate park to attempt tricks. That'd be a good start.*



- A Sailor was riding a scooter down a driveway that had an approximate 10-degree downward angle, or glide slope for the aviators. The scooter hit a rock and stopped while the Sailor continued his flight — scooter-less. As you can imagine, he didn't stick the landing. In fact, his brief flight ended with a hairline fracture to the left elbow and 15 days limited duty. The report says, "the member will no longer be riding the scooter." — *Good call, shipmate!*
- In the "we can't make this stuff up" locker, this one is word for word from the mishap narrative: "Member was riding his scooter while his dog was pulling it. Member did not wear any PPE (helmet or pads) though he knew that he should've worn. Dog apparently was at a trot or slow run (unknown speed, but member acknowledges that he was catching a good breeze). Somewhere in this scooter dogsled ride, the member lost control, fell to the ground and injured his ankle. The dog, by the bye, is doing fine. The member knew that scooter plus dog was a bad thing...and yes, PPE should've been worn. Twenty-five years old and going on six." This bad idea cost him injuries to his tendons and ligaments plus 12 lost work days. — *Is editorial comment even necessary?*



National E-scooter studies

A Consumer Reports investigation in early 2019 looked at 110 hospitals in 47 cities and found that at least 1,500 injuries occurred since rental e-scooters appeared in the fall of 2017. That's roughly 100 serious wipeouts per month nationally. Eight deaths were also tied to e-scooters during the same timeframe. A 53-year-old man died when he lost control of his e-scooter and hit a tree (no helmet). A month later a 5-year-old boy died when he fell off his e-scooter and was hit by a car. A month after that, A 20-year-old man was hit by a car while riding his e-scooter after midnight — and the list goes on.

A study by the Centers for Disease Control and Prevention and the City of Austin, Texas, found 160 e-scooter riders were injured in three months, with over half of them classified as "severe," including bone fractures and severe bleeding. In a fleet concentration area, the emergency room at Norfolk General Hospital reported a significant jump in emergency visits as soon as e-scooters arrived downtown. Ditto for Virginia Beach, with 10 people admitted in the first month, six of them needing surgery. These are just a few of the many examples, and reasons to take e-scooter seriously.

Key Takeaways

- 1. Just because you can, doesn't mean you should.** Jumping on a rental e-scooter with no experience and no safety gear just isn't smart...or healthy. It will probably get you to the ER instead of your destination.
- 2. Wear PPE.** We can't emphasize this concept enough — it can save your life. "Speed kills" isn't just a saying. We've shown what can happen while scootering at single-digit speeds; now double that and you're just asking for trouble. You already look like a clown riding that scooter, so put a helmet on!
- 3. Know the rules.** Many cities across the U.S. have placed restrictions on when and where you can ride an e-scooter, and some are working on legislation to ban them altogether. E-scooters are new territory in the transportation industry, so stay on top of the regulations and obey them. They exist for your safety.
- 4. Don't drink and scooter.** This should be obvious, but e-scooters strategically placed in busy metro nightlife areas are just begging for bar-hoppers to take the ride of a lifetime (or last ride of their life).



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And remember, "Let's be careful out there"